

Epidemiology

Clinical and hospital-based observational studies (Abs. 74–77)

Workplace health

Workplace health (Abs. 78)

Nursing science

Prevention, education, and disease management (Abs. 79–80)

Main conference

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Abstract session 1**1. Predictors of cardio pulmonary resuscitation outcome in post-operative cardiac children**

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Outcome of cardiopulmonary resuscitation (CPR) in children with congenital heart disease has improved and many children survived after in hospital cardiac arrest. The purpose of this study is to determine predictor of poor outcome after CPR in critical children undergoing cardiac surgery. We conducted a retrospective chart review and data analysis of all CPR records and charts of all post-operative cardiac children who had cardiac arrest and required resuscitation from 2012 till 2015. Demographic, pre-operative data were reviewed and analyzed during study period. 18 post-operative pediatric cardiac patients had CPR. Nine of them had return of spontaneous circulation (ROSC) and survived (50%). On average CPR was required on the 3rd postoperative day. Univariate analysis demonstrated that poor outcome was associated with higher lactic acid measured 4–6 h prior to arrest ($P = 0.045$) ($P = 0.02$) coupled with higher heart rate ($P = 0.031$), lower O_2 saturation ($P = 0.01$) and lower core body temperature ($P = 0.019$) record 6 h before arrest. Non-survival required longer resuscitation duration and more epinephrine doses ($P < 0.05$) higher heart rate, lower core body temperature, lower O_2 saturation and higher lactic acid measured 6 h before arrest are possible predictors of poorer outcome and mortality following CPR in post-operative cardiac children.

<http://dx.doi:10.1016/j.jsha.2016.04.002>**2. Minimally invasive mitral valve surgery why do you take the risks?**A. Attia^a, F. Oueida^b, K. Alkhamees^b
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During recent years, minimally invasive mitral valve surgery (MIMVS) become the preferred method of mitral valve repair and replacement in many institutions worldwide with excellent results, in spite of there is no clear definition of minimally invasive surgery and we do not have efficient studies about the risks of MIMVS comparing to conventional mitral valve surgery. Many studies are needed to clarify the need for either conventional or minimally invasive mitral valve surgery instead of personal preference. The patient's demographic profile, intraoperative data and postoperative outcomes of patients undergoing minimally invasive mitral valve surgery were retrospectively collected from our database from May 2011 to April 2014. We will present early and mid-term outcomes of patients undergoing minimally invasive mitral valve surgery in our institution. Seventy consecutive patients (45 male and 25 female), age 35 ± 12 years, underwent MIMVS surgery. Mean preoperative New York Heart Association function class was 2.6 ± 0.7 . Mean ejection fraction was 50 ± 8 . Cardiopulmonary bypass was instituted through femoral cannulation (28 of 70, 40%), or direct aortic cannulation (42 of 70, 25%). Aortic cross-clamp used in (66 of 70, 94.2%). Without aortic cross-clamp in (4 of 70, 5.7%), mitral valve repair has been done in (52 of 70, 74.2%), mitral valve replacement (18 of 70, 25.7%). Concomitant procedures included AF ablation (24 of 70, 34.2%), and tricuspid valve repair (33 of 70, 47.1%). No mortality recorded, residual mitral regurgitation was found in (6 of 70, 8.5%) during 1 year follow up. Cardiopulmonary bypass, and "skin to skin" surgery were 95 ± 35 and 250 ± 74 min, respectively. 4 patients (5.7%) underwent reexploration for bleeding and (57 of 70, 81.4%) did not receive any blood transfusions. Six patients (8.5%) sustained face oedema. Mean length of hospital stay was 7 ± 3.8 days. 18 patients (25.7%) did not feel any interest regarding cosmetic advantage over conventional surgery. Minimally invasive mitral valve surgery is an excellent alternative to conventional mitral valve surgery in most cases however comparing to conventional mitral surgery it shows long bypass time, long cross clamp time, difficult reexploration for bleeding and multiple body incisions.

<http://dx.doi:10.1016/j.jsha.2016.04.003>**3. Early outcomes of minimally invasive versus conventional mitral valve surgery in mitral valve diseases. A single institutional experience**E. Nourelden^a, W. Abu Khudair^b, M. Alnajjar^c,
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Minimally invasive techniques in cardiac surgery gained popularity due to many advantages like less post-operative pain, minimal blood loss, less hospital stay, less cost. Minimally invasive mitral valve surgery through